Amendments to the Claims

1-16. (Cancelled)

17. (New) Apparatus for analysing a polynucleotide, the apparatus comprising: a support having an impermeable surface; porous material attached to the impermeable surface; and an array of oligonucleotides attached to the porous material, wherein the array comprises at least two defined cells, the sequence of the oligonucleotides of a first cell is different from the sequence of the oligonucleotides of a second cell, and the oligonucleotides are shorter than the polynucleotide.

18. (New) Apparatus of claim 17, wherein the porous material is a microporous material.

19. (New) Apparatus of claim 17, wherein the support is made of a silicon oxide.

20. (New) Apparatus of claim 19, wherein the support is made of glass.

21. (New) Apparatus of claim 17, comprising between 72 and 1.1×10^{12} cells.

22. (New) Apparatus of claim 17, wherein each cell holds at least 3×10^{-12} mmol of oligonucleotide.

23. (New) Apparatus of claim 17, wherein the oligonucleotides are covalently attached to the porous material.

24. (New) Apparatus of claim 23, wherein the oligonucleotides are covalently attached by a terminal nucleotide.

25. (New) Apparatus of claim 17, wherein the oligonucleotides are synthesized *in situ*.

26. (New) Apparatus of claim 17, wherein the apparatus is manufactured using a computer-controlled device.

27. (New) Apparatus of claim 26, wherein the computer-controlled device is a printing device.

28. (New) A method of making an array of oligonucleotides, which method comprises: attaching a plurality of oligonucleotides to a porous material that is attached to an impermeable surface of a support, the oligonucleotides having different predetermined sequences and being attached to the porous material at different known locations on the surface of the support through a computer-controlled printing device.

29. (New) Method of claim 28, wherein the porous material is a microporous material.

30. (New) Method of claim 28, wherein the support is made of a silicon oxide.

31. (New) Method of claim 30, wherein the support is made of glass.

32. (New) Method of claim 28, comprising between 72 and 1.1×10^{12} known locations.

33. (New) Method of claim 28, wherein the computer-controlled printing device delivers at least 3×10^{-12} mmol of oligonucleotide to the known locations.

34. (New) Method of claim 28, wherein the computer-controlled printing device is a plotter or an ink-jet printer.

35. (New) Method of claim 28, wherein the oligonucleotides are covalently attached to the porous material.

36. (New) Method of claim 35, wherein the oligonucleotides are covalently attached by a terminal nucleotide.